

UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

David F. Gavin

Docket:

101792-200

Craig Waldron Robert J. Martin George A. Polson

Serial No .:

Assignee:

10/077,727

Art Unit:

1615

Filed:

Title:

February 15, 2002

Examiner:

SEP 2 7 2002 TECH CENTER 1600/2900

Certificate of Mailing

COMPOSITE BIOCIDAL PARTICLES

Date of Deposit September 23, 2002.

I hereby certify under 37 CFR 1.8(a) that this correspondence (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated above and is addressed to Commissioner for Patents, U.S. Patent and Trademark Office, Washington, DC 20231.

Signed:

Name: Dale Lynn Carlson

## INFORMATION DISCLOSURE STATEMENT TRANSMITTAL LETTER

Commissioner for Patents U.S. Patent and Trademark Office Washington, DC 20231

Dear Sir:

Pursuant to 37 C.F.R. §§1.56, 1.97 and 1.98, please find enclosed an Information Disclosure Statement, Form PTO-1449 and one copy of each cited reference. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the reference(s) be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

 $\boxtimes$ 

1. This Information Disclosure Statement is being filed within three months of the U.S. filing date OR before the mailing date of a first Office Action on the merits. No certification or fee is required.

| 2. This Information Disclosure Statement is being filed more than three months after the U.S. filing date AND after the mailing date of the first Office Action on the merits, but before the mailing date of a Final Rejection or Notice of Allowance.   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| <ul> <li>□ a. Each item of information contained on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1); and no fee is required under 37 C.F.R. §1.17(p).</li> </ul>   |  |  |  |  |  |  |
| b. No item of information cited on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application or, to my knowledge after making reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2); and no fee is required under 37 C.F.R. §1.17(p). |  |  |  |  |  |  |
| Please charge Deposit Account No. <u>23-1665</u> in the amount of \$180.00 in payment of the fee under 37 C.F.R. §1.17(p). Two additional copies of this Information Disclosure Statement are enclosed.   |  |  |  |  |  |  |
| A check in the amount of \$180.00 is attached hereto in payment of the fee under 37 C.F.R. §1.17(p).  |  |  |  |  |  |  |
| 3. This Information Disclosure Statement is being filed more than three months after the U.S. filing date and after the mailing date of a Final Rejection or Notice of Allowance, but before payment of the Issue Fee. It is hereby requested that the Information Disclosure Statement be considered.  |  |  |  |  |  |  |
| a. Each item of information contained on Form PTO-1449 filed herewith was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(1).  |  |  |  |  |  |  |

|   | b. No item of information cited on Form PTO-1449 filed herewith was cited in a      |
|---|---|
|   | communication from a foreign patent office in a counterpart foreign application     |
|   | or, to my knowledge after making reasonable inquiry, was known to any               |
|   | individual designated in 37 C.F.R. §1.56(c) more than three months prior to the     |
|   | filing of this Information Disclosure Statement. 37 C.F.R. §1.97(e)(2).             |
|   |   |
|   | Please charge Deposit Account No. 23-1665 in the amount of \$130.00 in payment      |
| • | of the fee under 37 C.F.R. §1.17(i)(1). Two additional copies of this Information   |
| ] | Disclosure Statement are enclosed.  |
|   |   |
|   | A check in the amount of \$130.00 is attached hereto in payment of the fee under 37 |
| • | C.F.R. §1.17(i)(1).   |
|   |   |

The undersigned represents that the closest art of which he is presently aware has been cited herein and understands that this statement shall not be construed as a representation that no better art exists or that a thorough patentability search has been made.

The undersigned further represents that the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b).

Date: September 23, 2002 WIGGIN & DANA LLP One Century Tower

New Haven, CT 06508-1832 Telephone: (203) 498-4385 Facsimile: (203) 782-2889

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Respectfully submitted, David F. Gavin, et al.

Dale Lynn Carlson Reg. No. 28,784

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): DAVID F. GAVIN

Docket No.:101792-200

CRAIG WALDRON ROBERT J. MARTIN GEORGE A. POLSON

Serial No. : 10/077,727

Examiner : Not assigned

Filed

: February 15, 2002

Art Unit : 1615

For

"COMPOSITE BIOCIDAL PARTICLES"

CERTIFICATION UNDER 37 CFR \$1.10

I hereby certify that this New Application Transmittal and the documents referred to as enclosed therein are being deposited with the United States Postal Service on this date September 23, 2002 in an envelope as First Class Mail with sufficient postage to Commissioner for Patents, U.S. Patent and Trademark Office, Washington DC 20231.

Dale Lynn Carlson

Name of Person Mailing Paper Signature

mature of Person Mailing Paper

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TECH CENTER 1600/2900

## INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents U.S. Patent and Trademark Office Washington, D.C. 20231

Dear Sir:

In keeping with the duty and candor and good faith owed to the Patent and Trademark Office, applicant wishes to make of record the items on attached PTO Form 1449. Copies of the items are provided in accordance with 37 C.F.R. 1.98.

- 1. U.S. Patent No. 2,786,847 which issued March 26, 1957 to Francis E. Cislak, entitled "2-Mercapto, Alkanol Pyridine-N-Oxides".
- 2. U.S. Patent No. 2,809,971 which issued October 15, 1957 to Bernstein et al., entitled "Heavy Metal Derivatives of 1-Hydroxy-2-Pyridinethiones and Method of Preparing Same".
- 3. U.S. Patent No. 3,589,999 which issued June 29, 1971 to McRae et al., entitled "Deionization Process".
- 4. U.S. Patent No. 3,590,035 which issued June 29, 1971 to Ralph A. Damico, entitled "Process for Preparing Pyridine N-Oxide Carbanion Salts".
- 5. U.S. Patent No. 3,773,770 which issued November 20, 1973 to Ralph A. Damico, entitled "Process for Preparing Pyridine N-Oxide Carbanion Salts and Derivatives Thereof".

- 6. U.S. Patent No. 5,057,153 which issued October 15, 1991 to Murray A. Ruggiero, entitled "Paint Containing High Levels of a Pyrithione Salt Plus a Copper Salt".
- 7. U.S. Patent No. 5,246,489 which issued September 21, 1993 to Farmer, Jr. et al., entitled "Process for Generating Copper Pyrithione In-Situ in a Paint Formulation".
- 8. U.S. Patent No. 5,298,061 which issued March 29, 1994 to Waldron et al., entitled "Gel-Free Paint Containing Zinc Pyrithione, Cuprous Oxide, and Amine Treated Rosin".
- 9. U.S. Patent No. 5,342,437 which issued August 30, 1994 to Gavin et al., entitled "Gel-Free Paint Containing Zinc Pyrithione Cuprous Oxide and Carboxylic Acid".
- 10. U.S. Patent No. 5,510,109 which issued April 23, 1996 to Tomioka et al., entitled "Antibacterial and Antifungal Composition".
- 11. U.S. Patent No. 5,540,860 which issued July 30, 1996 to Hosseini et al., entitled "Process for Preparing Copper Pyrithione".
- 12. U.S. Patent No. 5,595,750 which issued January 21, 1997 to Jacobson et al., entitled "Antimicrobial Particles of Silver and Barium Sulfate or Zinc Oxide".
- 13. Patent Abstract of Japan 06-134227 which issued May 17, 1994 to Nagata et al., entitled "Preparation of Antibacterial Filter Medium".
- 14. Patent Abstract of Japan 07-118103 which issued May 9, 1995 to Fujita et al., entitled "Method for Treating Stainless Steel Processed Part in Electric Washing Machine with Antimicrobial and Antifungal Agent Composition".
- 15. U.S. Patent No. 5,776,960 which issued July 7, 1998 to Oppong et al., entitled "Synergistic Antimicrobial Compositions Containing an Ionene Polymer and a Pyrithione Salt and Methods of Using the Same".
- 16. U.S. Patent No. 5,821,271 which issued October 13, 1998 to Karl F. Roenigk, entitled "Water Absorbing Porous Articles".
- 17. U.S. Patent No. 5,916,947 which issued June 29, 1999 to Morris et al., entitled "zinc Oxide Photoactive Antifoulant Material".

The undersigned applicants' attorney represents that the closest art of which he is presently aware has been cited herein and understands that this statement shall not be construed as a

representation that no better art exists or that a thorough patentability search has been made.

Respectfully submitted,

David F. Gavin et al.

Date: September 23, 2002

Dale Lynn Carason

Attorney for Applicants

Reg. No. 28,784

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## FORM PTO-1449

| INFORMATION DISCLOSURE<br>STATEMENT BY APPLICANT<br>Page 1 of 2 |   |              | ATTY, DOCKET NO.       | 101792-200                       | SERIAL NO.: 10/077,727 |                            |  |  |
|---|---|--------------|------------------------|----------------------------------|------------------------|----------------------------|--|--|
|   |   |              | APPLICANT: DAVID       | APPLICANT: DAVID F. GAVIN ET AL. |                        |                            |  |  |
|   |   |              | FILING DATE: Febru     | FILING DATE: February 15, 2002   |                        | GROUP: 1615                |  |  |
|   |   |              | U.S. PATENT DOCUME     | NTS                              |                        |                            |  |  |
| EXAMINER<br>INITIAL*  | DOCUMENT<br>NUMBER                                    | DATE         | NAME                   | CLASS                            | SUBCLASS               | FILING DATE<br>IF APPROPR. |  |  |
| <del>, -</del> .  | 2,786,847   | 03/1957      | Francis E. Cislak      | 260                              | 294.8                  |                            |  |  |
|   | 2,809,971   | 10/1957      | Bernstein et al.       | 260                              | 270                    |                            |  |  |
|   | 3,589,999   | 06/1971      | McRae et al.           | 210                              | 28                     |                            |  |  |
|   | 3,590,035   | 06/1971      | Ralph A. Damico        | 260                              | 290                    | RECEIV                     |  |  |
|   | 3,773,770   | 11/1973      | Ralph A. Damico        | 260                              | 290                    |                            |  |  |
|   | 5,057,153   | 10/1991      | Миттау A. Ruggiero     | 106                              | 18.33                  | SEP 2 7 2                  |  |  |
|   | 5,246,489   | 09/1993      | Farmer, Jr. et al.     | 106                              | 18.33                  | TECH CENTER                |  |  |
|   | 5,298,061   | 03/1994      | Waldron et al.         | 106                              | 18.33                  | TECH CENTER                |  |  |
|   | 5,342,437   | 08/1994      | Gavin et al.           | 106                              | 18.33                  |                            |  |  |
|   | 5,510,109   | 04/1996      | Tomioka et al.         | 424                              | 421                    |                            |  |  |
|   | 5,540,860   | 07/1996      | Hosseini et al.        | 252                              | 308                    |                            |  |  |
|   | 5,595,750   | 01/1997      | Jacobson et al.        | 424                              | 421                    |                            |  |  |
|   |   |              | FOREIGN PATENT DOCUM   | IENTS                            |                        |                            |  |  |
|   | DOCUMENT<br>NO.                                       | DATE         | COUNTRY                | CLASS                            | SUBCLASS               | TRANSLATION<br>Yes No      |  |  |
|   |   |              |                        |                                  |                        |                            |  |  |
| <del></del>   |   | <del>-</del> |                        |                                  |                        |                            |  |  |
|   |   |              |                        | L                                |                        |                            |  |  |
| OTHER DOCUM   | ·   |              | DATE, PERTINENT PAGES, | ETC.)                            |                        |                            |  |  |
|   | Patent Abstract of Japan: Nagata et al., JP 04-311206 |              |                        |                                  |                        |                            |  |  |
|   | Patent Abstract of Japan: Fujita et al., JP 05-297198 |              |                        |                                  |                        |                            |  |  |
| EXAMINER:   |   |              |                        | DATE CONSID                      | DERED:                 |                            |  |  |



FORM PTO-1449

| INFORMATION DISCLOSURE STATEMENT BY APPLICANT Page 2 of 2 |                               |                       | ATTY. DOCKET NO.101792-200                            |                                | SERIAL NO.: 1              | SERIAL NO.: 10/077,727     |  |  |
|---|-------------------------------|-----------------------|---|--------------------------------|----------------------------|----------------------------|--|--|
|   | -6                            |                       | APPLICANT: DAVID F. GAVIN ET AL.                      |                                |                            |                            |  |  |
|   |                               |                       | FILING DATE: F  | FILING DATE: February 15, 2002 |                            | GROUP: 1615                |  |  |
|   |                               |                       | U.S. PATENT DOCU                                      | MENTS                          |                            |                            |  |  |
| EXAMINER<br>INITIAL*                                      | DOCUMENT<br>NUMBER            | DATE                  | NAME  | CLASS                          | SUBCLASS                   | FILING DATE<br>IF APPROPR. |  |  |
|   | 5,776,960                     | 7/98                  | Oppong et al  | 514                            | 345                        |                            |  |  |
|   | 5,821,271                     | 10/98                 | Roenigk   | 521                            | 54                         |                            |  |  |
|   | 5,916,947                     | 6/99                  | Morris et al  | 524                            | 432                        |                            |  |  |
|   |                               |                       |   |                                | R                          | RECEIVED                   |  |  |
|   |                               |                       |   |                                |                            | SEP 2 7 2002               |  |  |
|   |                               |                       |   |                                | TECH                       | CENTER 1600/29             |  |  |
|   |                               |                       |   |                                |                            |                            |  |  |
|   |                               |                       | FOREIGN PATENT DOO                                    | CUMENTS                        |                            |                            |  |  |
|   | DOCUMENT<br>NO.               | DATE                  | COUNTRY   | CLASS                          | SUBCLASS                   | TRANSLATION<br>Yes No      |  |  |
|   |                               |                       |   |                                |                            |                            |  |  |
|   |                               |                       |   |                                |                            |                            |  |  |
| OTHER DOCUM   | MENTS (INCLUDIN               | G AUTHOR, TITLE       | , DATE, PERTINENT PAG                                 | ES, ETC.)                      |                            |                            |  |  |
|   |                               |                       |   |                                |                            |                            |  |  |
|   |                               |                       |   |                                |                            |                            |  |  |
| EXAMINER:   | EXAMINER:                     |                       |   |                                | DATE CONSIDERED:           |                            |  |  |
| *EXAMINER: In not considered.                             | nitial if citation consideral | dered, whether or not | t citation is in conformance wunication to applicant. | ith MPEP 609; Draw l           | ine through citation if no | ot in conformance and      |  |  |